

ABSTRACT OF THE DISCLOSURE

[00024] A method of cubic mapping with texturing is described. Neighboring pixels on an object are mapped to adjacent faces of the cube, but these adjacent faces do not guarantee continuity in the texture mip-map associated with each face. Therefore, the u and v texture map coordinates are adjusted after mapping to adjacent faces to make a continuity adjustment that insures that the LOD for the texture mip-map is the same for each adjacent face. The continuity adjustment includes either switching the u coordinate with the v coordinate or negating one of the coordinates or both. Additionally, if the u and v coordinates are normalized, the normalization may be compensated by adding or subtracting unity from the adjusted coordinate. After the continuity adjustment is made an approximation to the derivative is computed and used to determine the LOD for the mip-map. Texturing can then proceed using the LOD.